AU/ACSC/038/1999-04

AIR COMMAND AND STAFF COLLEGE

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WHERE IS THE BATTLE-LINE FOR SUPPLY CONTRACTORS?

by

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A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

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April 1999

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Preface

In writing this paper I became much more familiar with current initiatives being undertaken by the Army's logistic community. I am very impressed with the availability of current information on the CASCOM web page. I highly recommend logisticians at all levels check this web page periodically to ensure the most current information gets to the field. Additionally, I found that much focus is being placed on this topic in the logistician community currently.

Abstract

The combat commander demands to know when and where his logistical support will happen. He has the need to know this for ensured success on the battlefield. As the environment of the military changes to a military reliant on modern technology, using private industry's ideas and innovations to better field the force, the importance of maintaining this visibility of battlefield logistics becomes greater. The military system is based on doctrine which is followed by every soldier on the battlefield. The movement to incorporate civilian agencies into the operations of the military does not address their requirement to follow this doctrine. It must always be remembered that the goals of the military and of civilian agencies are different. The military has to train, equip and fight the wars, while commercial agencies' goals, particularly supply agencies, are to support the customer while ensuring a profitable operation. Taking advantage of this desire to support the customer and using the commercial agencies as a support base is a great step toward success in the military, it is just a step which must be monitored so as not to encounter a mine.

Chapter 1

Introduction

> *In total war it is quite impossible to draw any precise line between military and non-military problems.*
>
> —Winston Churchill

Once critical delivery of resupply items is made to the theater of operations, how does it get delivered to the user, and who makes that delivery, contracted agencies or the military? This is a question that must be accurately answered for success on the battlefield. As the military continues to downsize, more contracting is being performed for critical missions. In the Army, the area this paper will focus upon, a major area in which contracting is being used is in the delivery and resupply of products and equipment to the users. More emphasis is being placed on the ability to get support items delivered to the user within very limited timelines, as opposed to the units stockpiling items in case of need. This concept allows for the unit to focus its assets where needed, lessening the logistical support requirements. However, it requires what has become known as 'just in time' logistics. A process through which only the required support is provided as needed, allowing for no surplus and, more importantly, no shortfall. This system allows for adequate logistical support, but does not necessitate stockpiling of supplies or repair parts. Contractors have stood up to this task in garrison very well, but until recently, there has been little guidance as to how far into theater a contractor will be able to deliver

goods. The theater infrastructure will determine much of this, but in a well-developed country, where will the contractor stop and how quickly can units depend on getting their critical supplies?

This report will focus on simply presenting the current procedures and outline where there are areas which must be investigated and solved for this issue to be put to rest. The need for augmentation from contractors will not vanish, but the dependability issues must be confirmed for the use to be warranted and the units to have a totally reliable system from which to operate. Any assumptions throughout the paper will be stated as such and the limitation of this paper will be the assets available for review. It is my intent to show that the use of contracted agencies must be limited to the position on the battlefield where the current military supply distribution system initiates, at the Theater Distribution Management Center (TMC).

Chapter 2

Current peacetime supply process

I don't know what the hell this 'logistics' is that Marshall is always talking about, but I want some of it.

—Field Admiral E.J. King:
to a Staff Officer, 1942

Today, most Army forces and equipment have been withdrawn from forward locations and the Army is now primarily a CONUS-based force, with global responsibilities. The Army has demonstrated through recent force projection operations such as Bosnia, that it is able to rapidly deploy forces to anywhere on the globe. However, it also has been observed that the centralized management of distribution necessary for success within the theater is still a challenge that must be met. "Maintaining in-transit visibility and accountability of cargo and efficiently delivering it from ports to the customer with the "right stuff," to the "right place" at the "right time" still proves to be challenging."[1]

The biggest challenge facing the logisticians is keeping up with the force structure changes that are happening as the Army moves towards the 'Army After Next" and into a digitized battlefield. The logistics system must move from a supply based system to a distribution based system allowing the technologies to continue to progress. The necessity to maintain accurate, effective and efficient logistical support to the commander

remains a logistician's highest goal. This goal will be evaluated in terms of distribution success on the battlefield.

There are three components which comprise the idea of distribution and distribution management. They are: visibility, capacity and control. All must have reliable, current and accurate data to be of value to the combatant commander.[2]

Why is visibility so important? "Visibility is a positive indicator that the distribution pipeline is responsive to customer needs." (summarized from FM 100-10-1).[3] In fact, distribution managers dedicate most of their work to gaining and maintaining visibility of all the various assets, processes, and capabilities throughout the distribution pipeline. Visibility is the most essential component of distribution management. History is full of examples that prove the combatant commanders must be confident in the logistician's ability to sustain them. Timely and accurate visibility information provides logisticians necessary information to distribute assets on time thus maintaining those required high confidence levels.

Visibility is based on a continuum of logistics data from the sustainment base into and through the distribution processes of the distribution system (factory to foxhole). Visibility must begin at the point where materiel starts it's movement to the theater of operations, be that a depot or commercial vendor or a storage facility in another theater or war reserve stockpile. The information must be digitized and subsequently entered into the necessary logistics information systems. The next critical element to visibility is the capability to dynamically update that source data with updates from subsequent logistics systems as to the transport, storage, maintenance, or supply status of that particular item/shipment until it is received at the ultimate consumer location. The information

must be accessible to all users regardless of the service or echelon of command requiring the data. Two of the systems available, Joint Total Asset Visibility (JTAV) and Army Total Asset Visibility (ATAV) provide common elements of information on most facets of distribution. The Global Transportation Network (GTN) provides the transportation update and shipment information directly to army users or via JTAV/ATAV queries.[4]

These systems allow for the visibility of items from the contractor to the requester, however, once the item is placed into the normal military distribution system the maintaining of visibility becomes more difficult. This is primarily due to the level of communication and information systems available on the battlefield. As digitization of the battlefield becomes a reality, visibility issues will change accordingly. The total success of the distribution management system will be dependent upon the quality and interoperability of the logistical information and communication systems.

The second area is capacity, maximizing the logistical capacity of the theater, while not limiting the mobility of the combat commander. The integration of the full range of asset visibility information capabilities and the associated ability to control and allocate resources will permit logisticians to maximize critically limited logistics resources. The ability to anticipate logistics bottlenecks, disruptions and changes in the distribution operational schema is a key factor in allowing the successful distribution manager to optimize the theater's distribution capacity.

Logisticians work continuously to be able to identify distribution-based problems as they occur. While the Distribution Management Center (DMC) will continue to resolve the distribution management problems, the synergistic intent for this entity is to anticipate distribution needs, provide the necessary resources at the right time, monitor the logistics

execution, and as necessary, adjust the distribution system to avoid distribution problems. As decision support tools are developed and introduced into the DMC, more sophisticated problems can be anticipated and addressed. Until such time, distribution managers must provide much of the fusion and perform the processes to synthesize information across functionally oriented stovepipe information systems.[5]

The third function is that of control, and more importantly that of centralized control. The DMC must be the single focal point for distribution of logistics on the battlefield. The idea of distribution as a logistical function must be understood at all levels on the battlefield, and proper authority must be given to the DMC to control that distribution system.

The DMC can and must cut through the layers of functional commands and staff agencies to provide accurate and plausible solutions to developing situations that can throttle, disrupt or stop the essential flow of materials and units to critical locations on the battlefield. Traditional attitudes and procedures must be put aside for the overall efficiencies and effectiveness of the distribution process. Commanders can not be permitted to optimize their situations at the cost of sub-optimizing the capabilities of the overall distribution system.[6]

In order to understand the critical aspects of control of the distribution system, we must first look at the basic principles of distribution. Eight basic principles are examined and supported through current logistical systems in the Army.

1. Centralized Management. Centralizing management includes all aspects of the distribution system being controlled by a single organization. It must include total visibility and control of the entire distribution process from vendor to user. Under a

Distribution Based Logistics System (DBLS), designated distribution managers will establish, coordinate, and synchronize the distribution plan and logistics flow, and maintain and use this information to resolve critical distribution issues for supported units. The organization assigned this task at the tactical level is the DMC. The DMC is tasked to translate the CINC's logistics guidance and priorities into a workable Theater Distribution Plan that is linked to the sustainment flow from CONUS. This flow must be monitored through all agencies in the pipeline to be successful.

2. Optimizing infrastructure. Optimizing infrastructure is dependent on the full spectrum of visibility and will allow distribution managers to reallocate/acquire physical and resource network capabilities necessary to meet the changing battlefield requirements. Battlefield contracting, forward-deployed logistic elements from CONUS, or new ways of working with the host nation will be critical to realizing this principle in a DBLS.

3. Velocity over mass. At the heart of a DBLS is the principle of "velocity over mass." This principle is improving the flow (speed and accuracy) of materiel, personnel, equipment, and information through the logistical requisition and supply process. This is accomplished in part by the Velocity Management (VM) program. VM seeks to help implement the change from mass to velocity by addressing some basic issues in distribution: reducing order ship time and minimizing backorders, reducing repair cycle time, improving stockage determination procedures, and improving the accuracy and timeliness of accounting systems.[7]

4. Reduced response time. Reduced logistics response time (i.e. order-ship time) is the culminated effort of velocity over mass. The key is the right item or person, to the

right place at the right time and in the shortest amount of time. VM will be discussed in more detail in the next chapter.

5. Minimizing stockpiling. This is necessary as the Army moves from forward stationed to a rapid response force. The idea is dependent on the time-definite delivery, (discussed later as principle number 7), of resources through the distribution system. It involves the ability to understand the minimum essential amounts of supplies required to initiate operations and the continuous flow of follow-on support and resources necessary to maintain operations once the theater matures.

6. Maximizing throughput. This is a sub element of minimized stockpiling. Throughput distribution bypasses one or more echelons in the supply system to minimize handling and speed delivery forward. This is a key area where supply contractors will have a role on the battlefield of the future. Direct delivery to the user is done in garrison on a daily basis, and must be integrated onto the battlefield.

7. Time-definite delivery. Time-definite delivery is the process of delivering the materiel, equipment and personnel to the combatant commander at the right time. This principle is key, because it builds confidence in the supported unit, that the logistics system can support operational requirements and eliminate the need (or perceived need) for the stockpiled stores of materiel that have characterized past logistics operations.[8]

8. Continuous and seamless pipeline flow. The principle of continuous and seamless pipeline flow involves the application of all other distribution principles to produce the end-to-end continuum of a DBLS. The integrated CSS/C2 automation and communications networks of the distribution system provide the strategic, operational, and tactical connectivity that allows the distribution management structure the capability

to maintain visibility of the flow. This is where the combination of visibility, capacity, and control must come together to enable the total success of the distribution based system.

The bottom line is that the logistics planners with maximum asset visibility and thus the best distribution management, will be best able to support the combat commander's planning and execution with timely and proactive logistics. This will in turn free the combat commanders and their staffs to focus on the combat mission at hand.

Notes

[1] Distribution Management Center, Tactics, Techniques and Procedures, September 1998.
[2] Ibid. .
[3] Ibid.
[4] Ibid.
[5] Ibid.
[6] Combined Logistics Officer Advance Course, Sub-course on Distribution Management, 1997.
[7] Velocity Management Training Support Plan, CASCOM, January 1996.
[8] Ibid.

Chapter 3

Contractor's role on the battlefield

The key to success of the distribution system is to have items available to place into the distribution flow at very little, or no notice. The Army's most recent operations—Just Cause, Desert Shield/Storm, Restore Hope—though highly successful, revealed shortcomings in the logistics system. The time needed to respond to orders placed from the theater was excessive. Partly because of these operations, a consensus among the Army leaders shows that significant improvement of logistics support is required. In the past, the Army has been able to rely on forward deployed forces and prepositioning of resources. In the future, a smaller percentage of the force structure will be deployed overseas. The difficulty in predicting where the next operation will occur means less reliance on prepositioning. This means a much greater portion of logistics support will have to come from CONUS.

The current, needing to be changed, logistics system amasses "days-of-supply" of various commodities in an effort to buffer the system's long resupply times and highly variable peacetime and contingency performance. Part of the reason for this is that the Army's current logistics processes were designed in a period when materiel was relatively cheap and transportation relatively expensive. Now, however, the costs of acquiring major weapon system components have sharply increased, while the costs of transporting

materiel have sharply decreased. As a result, old assumptions no longer apply. Policies regarding when it is cost-effective to hold rather than move materiel, or when to use premium transportation, need to be reexamined. For example, in 1990 the Army Materiel Command had nearly $60 billion in inventory above the unit level. Yet, with all that inventory, too many operational commanders did not have the stocks they needed at the right place and time. Now, tight budgets do not permit the buildup of massive inventories. Velocity will have to replace mass.[1]

Responsiveness (the ability to quickly and accurately meet the needs of mission commanders) will be the key to the future logistics system. The customers are the field commanders who have continually required a logistical support system that is reliable, flexible, and responsive. They are also concerned that this system must meet the budget constraints and maximize effectiveness. Therefore, logisticians need to analyze current processes and design an improved logistics system that will answer all the customers' needs.

Individuals, in their private lives, are accustomed to customer-focused services to meet their needs and those of their families. They order items of clothing or computer software from a catalogue and get efficient, rapid, and accurate delivery of these products to their homes. They go to an auto parts store and are either promptly supplied a part or have it ordered for delivery within one to three days. Army commanders want the logistics system of the Army today to offer comparable service at comparable costs. The velocity management initiatives are intended to meet this reasonable expectation.

It will be up to the logisticians in the process to change the culture of the Army, allowing change from the logistics system today to the one of the future. If the Army

logistics system continues to do business in the same way, it will continue to get the same results. This is beyond doing more with less, or making the best of what is currently available. The Army logistics community must understand and accept the change that improves the responsiveness and efficiency of the Army logistics system. Managers and supervisors at all levels must lead this change. Velocity Management is an initiative which examines the current process and identifies areas where improvements can be made.

The critical first step in implementing velocity management is to clearly define the process you want to improve. Identify the inputs to the process, including materiel, information, money, time, personnel, and others. Identify the outputs from the process similarly. For each input, identify its providers. For each output, identify its customers. The identity of providers (contractors) and customers will be important in later steps of the implementation. The system will have to identify how to work with the contractors to improve inputs and with customers to establish output improvement goals or needs. A key goal for improving the Army logistics system is to provide better support to the customer. The ultimate customers of the system are the mission commanders and the soldiers in the field. However, the internal customers of each process and segment must be satisfied if the ultimate customers are to be served.

Each segment must be examined to ensure maximum efficiency and goals set for improvements for the process to move forward. Goal setting requires information from several sources. One source is the customer of your process. However, customers may not be the best judges of what they want if they do not have a good understanding of what is possible. Another source of information is benchmarking, i.e., determining what level of

performance other organizations, including commercial organizations, are achieving in performing similar or comparable activities. Benchmarking focuses on organizations considered high performers that reflect the state of the art in what is technically feasible.

Setting goals requires careful analysis of the baseline performance. Remember, accuracy and integrity of your baseline performance measurements are critical to the establishment of future performance goals.[2]

Today the supply clerks have the ability to go directly to the vendor through the contracting system to get supplies needed that are not currently in the military supply system. This is done in one of several ways. One way is for the unit supply clerk to use a credit card (IMPAC) given to the unit with a pre-authorized spending level. This is a financial management tool as well as a logistical initiative. This allows contractors (vendors) to interact on a one-to-one basis with the supply clerks, and the individual units. Goods are ordered and delivered via the commercial system, bypassing the military system completely. In CONUS, contractors routinely arrive at the unit's site with the desired goods, offering the best customer relations available. This may not be possible in zones of combat.

Notes

[1]Velocity Management Concept Briefing Fact Sheet, CASCOM 1995.
[2] Ibid.

Chapter 4

Battlefield Logistics

> *The more I see of war, the more I realize how it all depends on administration and transportation…It takes little skill or imagination to see where you would like your army to be and when; it takes much knowledge and hard work to know where you can place your forces and whether you can maintain them there. A real knowledge of supply and movement factors must be the basis of every leader's plan; only then can he know how and when to take risks with those factors, and battles are won only by taking risks.*
>
> —General A.C. P. Wavell
> A great modern soldier

Throughout military history, vital strategic decisions that led to victory or defeat have been influenced by important logistics consideration of how to feed, move and sustain the troops."[1] The recognition of the importance of these decisions have led to more research in the distribution management aspects of logistics.

Distribution management encompasses the organizations, doctrine, policy, and training required to implement a distribution based system. Most challenging perhaps is not the basic implementation of each component piece, but the integration between levels so that the system is truly seamless. Distribution Management is a fully integral part of the Battlefield Distribution concept. Effective distribution management will synchronize and optimize the various sub-elements of the distribution equation: movement control, nodal operations, materiel management, supply support and associated technology.

The DMC is the focal point for controlling the continuity of CSS (Combat Service Support) pipeline through situational awareness resulting from total asset visibility. This awareness permits control encompassing the distribution of materiel, equipment, personnel and soldier support items. The control provided by the DMC integrates the various distribution functions into a more streamlined and efficient distribution system. It integrates the totality of strategic, operational, and tactical logistics capabilities to provide reliable, effective and efficient distribution within the theater of operation.

As Command and Control elements and their associated support relationship change on the battlefield, the logistics community must keep abreast of these changes. Maintaining these relationships ensures the entire spectrum of the supply system can package and ship materiel directly to units in the theater. This information allows the DMC, control centers, and other elements of support operations to maintain visibility and control of the distribution system. The ability of distribution activities to hold, divert, and redirect unit equipment, personnel, supplies and services, and other support to their ultimate delivery sites depends on distribution managers and commanders knowing who is supporting whom and where they are on the battlefield.

World Class Logistics defines agility as "the competency that sustains world class performance over time… and is built upon three key capabilities: (1) relevancy, (2) accommodation, and (3) flexibility." The Council of Logistics Management (CLM) describes relevancy as "the ability to maintain focus on the changing needs of customers." Advocates of change within DOD are calling for an agile infrastructure precisely because future peacetime and wartime scenarios will require the ability to change quickly, and affordably, in response to technology and threats.[2]

The second capability, accommodation, is described as "the ability to respond to unique customer requests." In DOD, this is called "support tailoring," a concept that Joint Vision 2010 endorses. Many observers believe that industry provides tailored solutions better than do rigid military services and Defense agencies.[3]

The final capability, flexibility, is described as "the ability to adapt to unexpected circumstances." Flexibility has been a long-standing requirement of DOD logistics concepts. Warfighters covet the logistics capability to encounter, resolve, and, when appropriate, exploit the unexpected emergency or opportunity. Flexibility also is a virtue in mobilization. In industry, flexibility can provide reserve production or distribution power. In DOD, flexibility can provide reserve striking power, which is the essence of mobilization.[4]

Reasons for outsourcing range from cutting costs, time or resources to gaining access to resources not available internally or increasing research data bases. It is important to recognize that each of these reasons, to varying degrees, are attractive areas to review in the Army's attempt to restructure the logistical infrastructure. These coincide with the reasons why DOD is emphasizing competitive sourcing strategies. Similarly, it is interesting to note that most of these reasons help organizations become leaner, more robust, and thereby more agile. The pursuit of agility through competitive sourcing solutions appears to be a common objective of industry and Government alike.[5]

"But exactly how do competitive sourcing strategies contribute to more agile organizations and processes? The following advantages of competitive sourcing are particularly relevant to DOD's pursuit of a more agile infrastructure. Competitive sourcing will—

Give DOD access to a broader range of sources for support and surge capability.

Speed incentives for internal reengineering (improving processes). For example, the Air Force has been influenced by the leading-edge practices of commercial airlines.

Reengineer vertically integrated organizations that have grown obsolete, making enterprises smaller, more focused, and more fluid.

Provide for speedy capture of innovations, which allows technology to be leveraged quickly.

Gain access to resources or expertise not available internally.

Permit contracting flexibility for things the Government cannot do.

Allow development of integrated supplier concepts, such as those several commercial airlines are adopting (for example, British Airways and Southwest).

Allow lower inventory levels, nimble transportation, and reduced cycle times."[6]

It is frustrating to think that the Army could receive all these benefits through adopting competitive sourcing and privatization, and yet there is hesitation to do so. There is no doubt that a partnership is necessary between the government and industry in times of mobilization. History shows few if any examples of where the military has been successful without this partnership. However, because it does require total committment from both agencies, the Army is not ready to abdicate infrastructure management. In the historical scenarios discussed earlier, the private sector had a huge role in assembling, producing, and projecting the elements of infrastructure; however, none of those scenarios involved the degree of private-sector performance, management, and control of defense infrastructure elements being espoused today. Military buyers of infrastructure services should be cautious about relying on contractors, particularly where real-time

control is critical. Competitive sourcing and privatization imply the formation of strategic relationships with external suppliers that will lead to some loss of military control over essential functions. The fog and friction typical of war caution us that losing control could be instrumental to losing the war.[7]

Still, there is little doubt that the military must increase its reliance on private-sector providers, particularly to support small- to medium-scale deployments associated with our current geopolitical objectives. Today, many of its infrastructure activities consist of support functions that are not directly related to core military competencies. These functions claim an unaffordable 60 percent of the Department of Defense budget. Yet cost reduction is not the most important reason to use private sector providers of infrastructure services—performance improvement is. Industry has bypassed the military in most areas of logistics support capabilities: responsiveness, innovation expertise, surge and agility.[8]

"Unfortunately, much energy still is being expended across the military services and Defense agencies (and in Congress) to preserve and protect organic assets that are not essential to defense missions. A better use of this energy would be integrating DOD's and industry's core competencies. Long-term integration of contract suppliers and military buyers will yield the infrastructure agility highly prized during peace, mobilization and combat."[9]

Notes

[1] *Army Logistician*, PB700-98-6, Volume 30, Issue 6, September-October 1998.
[2] *Army Logistician*, PB700-99-1, Volume 31, Issue 1, January-February 1999.
[3] Ibid.
[4] Ibid.
[5] Ibid.

Notes

[6] Ibid.
[7] Ibid.
[8] Ibid. pp. 63-64.
[9] Ibid.

Chapter 5

Future Operations

> *"There can be no revolution in military affairs (RMA) without first having a revolution in military logistics (RML). To provide the capabilities-based forces we need for the future, we must set the stage for transformation by changing the way we project and sustain those forces."*
>
> —General Dennis J. Reimer, U.S. Army Chief of Staff

The logistic community of the Army is working tirelessly to ensure the success of the Army after next. Commercial practices are being examined by the logistics community to determine where they can be integrated into the military system. The practices identified as the best practices enabling these organizations to deliver world-class standards of performance to their customers are the key area of emphasis. "Integrated supply chain management, industry's changing view of logistics, electronic commerce, automated identification technology, direct vendor delivery, load optimization, outsourcing, and smart simple design are all examples of commercial best practices that could be very useful in helping the Army achieve the RML."[1]

Integrated supply chain management includes the highest levels of suppliers down through the system to the ultimate single customer. Currently this is being accomplished throughout industry through integrated software systems, available at a high initial cost to the industry but recognized as offering future cost savings by tailoring the system to maximize effectiveness.

Electronic commerce is the practice of using the internet and other electronic technologies and applications to affect the logistics of the system. "Electronic commerce and the sharing of information among entities and organizations facilitates vendor-managed inventories, paperless contracting, collaborative forecasting, and workflow management."[2]All these aspects, when put in to the military context will greatly enhance the effectivity of the logistics system and allow for total success on the battlefield. Perhaps President Clinton said it best: "I call upon all Internet users—both Government and in the private sector—to join me in seeking global consensus…so that we may enter the new millennium ready to reap the benefits of the emerging electronic age of commerce."[3]

Automated Identification Technology is simply the technology that allows for the identification of a item of supply through an automated database. It is used in the military currently during deployment as major end items are identified with labels which are read by a scanner which places that item into a database. This allows for load plans of deployment vessels to be quickly assembled, and allows the receiving port to know what is expected to arrive. The commercial industry has taken this one step further and has been able to identify the smallest item, and track that item as it transits the logistical system. Another benefit the military can use to achieve the total asset visibility required in future operations.

Direct vendor delivery is the direct deliver of items from vendor to customer. This allows the system to bypass needless handling thereby decreasing the order-receipt time. This is a great benefit when it is dependable to the user/requester. This is also the area

where additional research must be accomplished to delineate between the garrison environment and the battlefield.

Load Optimization is a software program that plans and optimizes loads for trucks and containers. This ensures full use of the capacity available for delivery to the requester. Ensuring the maximum amount of supplies are loaded on each truck designated for a specific user allows for less traffic on a particular route, thus maximizing the transportation network.

As discussed in the last chapter, outsourcing is done for reasons of lower costs, streamlined labor force, access to top personnel and cutting-edge technologies. By partnering with other organizations a company or the military can increase its service levels and limit response time while maximizing cost effectiveness.

"Smart simple design can be achieved by designing equipment with fewer, standardized parts, at reduced cost, with higher quality, faster manufacture and assembly cycle times, and better serviceability."[4] By decreasing the number of supply items in the inventory, either by combining like type items or by designing new multifunctional items, lessens the workload of the supply system. This in turn increases the efficiency of that system.

Additional work in research and development is continuously being done to look for additional ways to improve and streamline the logistical system. "The Army must partner with world-class logistics providers when beneficial and become a world class provider itself by leveraging the best industry has to offer. The challenge is to determine where and when to pursue each of these industry-proven strategies."[5]

Notes

[1] Ibid. p 33.
[2] Ibid. p 34.
[3] Ibid. p 68.
[4] Ibid. p 35.
[5] Ibid.

Chapter 6

Conclusions

> *Sound logistics forms the foundation for the development of strategic flexibility and mobility. If such flexibility is to be exercised and exploited, military command must have adequate control of its logistic support.*
>
> —Rear Admiral Henry E. Eccles:
> Logistics in *The National Defense*, 1959

The only way success will be identified in future logistical operations will be through the maximizing of all assets available to the need at hand. The Army logisticians must embrace all innovations which will maximize the efficiency of the logistical pipeline. The digitization of the battlefield demands the logistics system mature accordingly. Looking to the private sector for better ways to accomplish integration of this digitization is not a bad approach. In fact, using the private sector is an approach which must be taken aggressively but must at all times be tempered with the realization that the primary mission of the Army is to fight and win America's wars. Contractors are not trained in combat and consideration of the impact of this must be made as items are oursourced through the system.

Contractor support has always played a role on the battlefield and will do so in the future. The concern is finding the right mix of contractor involvement and force structure to support the logistical system. In the case of supply distribution the determination of where on the battlefield the vendor to user delivery must stop is critical. With total asset

visibility and velocity management initiatives moving forward successfully, the need for this determination is perhaps being ignored.

"Support is a command authority."[1] As such the integration of non-military sources into the system must be approached cautiously. The supported commander retains the priority of support, and is the focus of attention to the Theater Distribution Center (TMC) when sending supplies into the battlefield. If direct vendor activity is allowed to continue on the battlefield, the TMC, a key to maintaining control of the logistics of the theater will be bypassed and there will be a loss of control of distribution management. Although initiatives must continue to lessen the pipeline through which supplies flow, the stop point of that distribution must be identified for times of conflict. Additionally, logistic units in support of the forward combat elements must understand the procedures will be different on the battlefield.

The RML will happen in response to the design of the Army After Next, and in peacetime will become the most effective logistics system possible. The initiatives identified in this paper will help make this come to fruition, and must be aggressively pursued. It will take total understanding of all the issues at hand to ensure this RML does not preclude controlled support on the battlefield.

Notes

[1] Joint Pub 3-0 p. II-8.

Glossary

ATAV	Army Total Asset Visibility
CINC	Commander in Charge
CLM	Council of Logistics Management
CONUS	Continental United States
CSS	Combat Service Support
DBLS	Distribution Based Logistics System
DMC	Distribution Management Center
DOD	Department of Defense
GTN	Global Transportation Network
JTAV	Joint Total Asset Visibility
RMA	Revolution in Military Affairs
RML	Revolution in Military Logistics
TMC	Theater Management Center
VM	Velocity Management

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Joint Vision 2010

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